

REMARKS

I. General Remarks

Please reconsider the application in view of the above amendments and the following remarks. Applicants thank the Examiner for carefully considering this application.

II. Disposition of Claims.

Claims 1-5, 7, 8-12, 15-19, and 21 are pending in this application. Claims 1, 8, and 15 are independent. Claims 2-5 and 7 depend directly from claim 1, claims 9-12 depend directly from claim 8, and claims 16-19 and 21 depend directly from claim 15.

III. Objections to Claims 16-21.

Pending claims 16-19 and 21 have been objected to for informality and have been amended in this reply in accord with the Examiner's suggestion.

IV. Rejection of Claims under 35 U.S.C. § 102(b).

A. Thomas *et al.* does not anticipate claims 1-21 as amended.

Pending claims 1-5, 7, 8-12, 15-19, and 21 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,036,919 to Thomas *et al.* ("Thomas"). Independent claims 1, 8, and 15 (from which all remaining claims depend) have been amended in this reply to clarify the present invention recited. To the extent that this rejection may still apply to the amended claims, the rejection is respectfully traversed.

Examiner notes that *Thomas* discloses methods that use a first fluid containing carbon dioxide (*citing* col. 3, lines 20-24). *Thomas* at col. 3 lines 20-24 refers to "any of these first fluid compositions" (emphasis added) to refer to col. 3 lines 12-20 wherein *Thomas* teaches that suitable first fluids are:

"selected from a group of relatively high temperature stable fracturing fluids which generally comprise guar-based polymers such as guar and hydroxypropyl guar or cellulosics such as carboxymethylhydroxyethyl cellulose which are crosslinked with a variety of organometallic crosslinkers ..." (emphasis added)

In fact, the teachings in *Thomas* specifically envision the use of a high temperature and very stable crosslinked first fluid to be followed by a “second, less damaging, lower temperature stable fracturing fluid.” (*see* col. 2 lines 51-65.) By contrast, the present invention, as clarified with the above amendments, teaches the use of a carbon dioxide-containing but uncrosslinked first fluid. Such a first fluid, by its very nature would not qualify as a “relatively high temperature stable fracturing fluid” and would, in fact, be significantly less stable under temperature stresses than a crosslinked fluid.

In view of the above, *Thomas* fails to show or suggest the present invention as recited in the claims 1, 8, and 15 as amended. Thus, the claims as amended are patentable over *Thomas*. Dependent claims are allowable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

A. Harms does not anticipate claims 1-21 as amended.

Claims 1-5, 7, 8-12, 15-19, and 21 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,271,466 to Harms (“*Harms*”). Independent claims 1, 8, and 15 (from which all remaining claims depend) have been amended in this reply to clarify the present invention recited. To the extent that this rejection may still apply to the amended claims, the rejection is respectfully traversed.

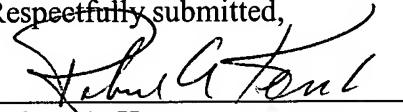
Examiner notes that *Harms* discloses methods that use a first fluid containing carbon dioxide (*citing* col. 4, lines 41-42). While *Harms* at col. 4, lines 41-42 does disclose that a first fluid may comprise carbon dioxide, *Harms* also consistently describes acceptable first fluids as crosslinked gels (*see for example* col. 2, line 51 and 64, col. 3 lines 7, 58-68, col. 4, lines 10, 33-40). Moreover, at col. 4 lines 6-10 *Harms* specifically addresses the notion of adding carbon dioxide to a crosslinked first fluid by noting that “lower pH resulting from the presence of the carbon dioxide does not adversely affect the delay in crosslinking or gel stability.” By contrast, the present invention, as clarified with the above amendments, teaches the use of a carbon dioxide-containing but uncrosslinked first fluid.

In view of the above, *Harms* fails to show or suggest the present invention as recited in the claims 1, 8, and 15 as amended. Thus, the claims as amended are patentable over *Harms*. Dependent claims are allowable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

SUMMARY

In light of the above amendments and remarks, Applicants respectfully request reconsideration and withdrawal of the outstanding rejections and objections. Applicants further submit that the application is now in condition for allowance, and earnestly solicit timely notice of the same. Should the Examiner have any questions, comments or suggestions in furtherance of the prosecution of this application, the Examiner is invited to contact the attorney of record by telephone, facsimile, or electronic mail.

Applicants believe that there are no fees due in association with this filing of this Response. However, should the Commissioner deem that any fees are due, including any fees for extensions of time, Applicants respectfully request that the Commissioner accept this as a petition therefore, and direct that any additional fees be charged to Deposit Account of Halliburton Energy Services, Inc., No. 08-0300 (Reference Number HES 2003-IP-0011793U1).

Respectfully submitted,


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Date: February 24, 2005